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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,227	02/19/2004	Charles Edward Akers JR.	2003-0701.01	5201

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EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 08/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/782,227

Applicant(s)

AKERS ET AL.

Examiner

Callie E. Shosho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

**Claim Rejections - 35 USC § 102**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-8 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Sun et al. (U.S. 2004/0127619).

The rejection is adequately set forth in paragraph 2 of the office action mailed 5/20/05 and is incorporated here by reference.

3. Claims 1-8 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Akers, Jr. et al. (U.S. 6,652,634).

The rejection is adequately set forth in paragraph 3 of the office action mailed 5/20/05 and is incorporated here by reference.

4. Claims 1, 3, 9, 11-12, and 14-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Sacoto et al. (U.S. 2004/0102541).

The rejection is adequately set forth in paragraph 4 of the office action mailed 5/20/05 and is incorporated here by reference.

**Claim Rejections - 35 USC § 103**

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akers, Jr. et al. (U.S. 6,652,634).

The rejection is adequately set forth in paragraph 7 of the office action mailed 5/20/05 and is incorporated here by reference.

**Response to Arguments**

7. Applicants' arguments filed 6/7/05 have been fully considered but they are not persuasive.

Specifically, applicants argue that Sun et al., Akers, Jr. et al., and Sacoto et al. are not proper references against the present claims under 35 USC 102 given that while each reference discloses amount of pigment, i.e. 0.1-10%, encompassing the presently claimed amount of pigment, i.e. at least about 4%, the disclosure of a range does not destroy the novelty of specific amounts within the range. As evidence to support this position, applicants point to MPEP 2144.05.

However, firstly, it is noted that Sun et al., Akers, Jr. et al., and Sacoto et al. each disclose amount of pigment that clearly overlaps that presently claimed. Further, it is not clear why applicants point to MPEP 2144.05 which is drawn to obviousness of ranges. As set forth above, the present claims have been rejected as anticipated by the prior art under 35 USC 102.

Applicants' attention is drawn to MPEP 2131.03. This portion of the MPEP drawn to anticipation of ranges states that when the prior art teaches, overlaps, or is within the claimed range, but no specific examples falling within the claimed range are disclosed, a case by case determination must be made as to anticipation. Further, this portion of the MPEP states that "if the claims are directed to a narrow range, the reference teaches a broad range, and there is evidence of unexpected results within the claimed narrow range, depending on the other facts of the case, it may be reasonable to conclude that the narrow range is not disclosed with "sufficient specificity" to constitute an anticipation of the claims.

However, the present claims are not drawn to a "narrow range" as set forth above. That is, the claimed amount of pigment is broad as compared to the amount of pigment recited by Sun et al., Akers, Jr. et al., or Sacoto et al.. The claimed amount of pigment, i.e. at least about 4%, is open-ended, and thus broader than the amount of pigment disclosed by either Sun et al., Akers, Jr. et al., or Sacoto et al.

It is the examiner's position, therefore, that Sun et al., Akers, Jr. et al., or Sacoto et al. does disclose the claimed invention with sufficient specificity. According to MPEP 2131.03, the "test" for lack of sufficient specificity arises when the claimed range is narrow with respect to the broad reference range. That, however, is not the case here given that the claimed amount of pigment are broader than the amount of pigment disclosed by Sun et al., Akers, Jr. et al., or Sacoto et al.

With respect to claims 9-14, applicants argue that Akers, Jr. et al. do not teach the presently claimed ratio of MAA to TRISA and NPHPPG combined. Rather, Akers, Jr. et al.

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teach ratio of 4.5:1 (Dispersant D) or 7.5:1 (Dispersant E) which falls outside the scope of the present claims which require ratio of at most about 3:1.

It is agreed that Dispersants D and E teach ratio of MAA to TRISA and NPHPPG combined that falls outside the scope of the present claims. However, these are just two preferred embodiments of Akers, Jr. A fair reading of the reference as a whole discloses that in the dispersant the ratio of hydrophilic portion, i.e. MAA, to hydrophobic portion, i.e. TRISA and NPHPPG, is 4:1:1 to 40:2:1. Further, it is disclosed that the hydrophilic portion is responsible for controlling the solubility of the dispersant and the stability of the dispersion while the hydrophobic portion anchors the dispersant to the pigment (col.4, lines 26-345 and 53-54 and col.6, lines 64-67).

In light of the above, it would have been within the skill level of, as well as obvious to one of ordinary skill in the art, to choose ratio of MAA to TRISA and NPHPPG combined, including at most about 3 parts to 1 part as presently claimed, in order to control the solubility of the dispersant and the stability of the ink, and thereby arrive at the claimed invention.

Applicants also argue that the examples of Akers, Jr. et al. teach the use of 3% pigment which is outside the scope of the present claims.

However, the examples of Akers, Jr. et al. are just a few preferred embodiments. A fair reading of the reference as a whole discloses that the ink of Akers, Jr. et al. comprises 0.1-10% pigment which clearly encompasses the amount present claimed. It is noted that "nonpreferred disclosures can be used. A nonpreferred portion of a reference disclosure is just as significant as

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the preferred portion in assessing the patentability of claims”, *In re Nehrenberg*, 280 F.2d 161, 126 USPQ 383 (CCPA 1960).

In light of the above, it is the examiner’s position that Sun et al., Akers, Jr. et al., and Sacoto et al. each remain relevant references against the present claims.

**Conclusion**

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
8/12/05